

ABSTRACT OF THE DISCLOSURE**METHOD AND APPARATUS TO INCREASE THE COLOR GAMUT PRODUCED BY
LCOS AND OTHER PROJECTION SYSTEMS**

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Liquid Crystal on Silicon (LCoS) microdisplays are individually illuminated with primary color light beams separated from an input light. The primary colors of the input light are sequentially changed and each microdisplay "displays," or is otherwise energized to modulate the primary color light beam illuminating the microdisplay with image content. Each microdisplay's image content is "displayed" synchronously with, and is of a color corresponding to, the primary light beam illuminating the microdisplay. The modulated primary color light beams are recombined and output to a display. The primary colors of the input light alternate, for example, between either of RGB and YMC, and RGB and YCM. The alternating primary colors are produced, for example, by a color wheel having sections of color transmissive filters.